
Subject: Trouble reading unformatted f77 (unix) integers?
Posted by [Brett Hennig](#) on Wed, 10 May 1995 07:00:00 GMT
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Here's the problem:

The F77 code:

```
open(unit=51,name='test1.dat',status='unknown',form='unformatted')
write(51)1,2,3
close(51)
end
```

The idl code(that doesn't work):

```
openr,n,'test1.dat',/get_lun,/f77_unformatted
x=0 & y=0 & z=0
readu,n,x,y,z
print,x,y,z -----> 1    0    2
free_lun,n
end
```

Code that does:

```
openr,n,'test1.dat',/get_lun,/f77_unformatted
x=0 & y=0 & z=0 & dum1=0 & dum2=0
readu,n,x,dum1,y,dum2,z
print,x,dum1,y,dum2,z -----> 1    0    2    0    3
free_lun,n
end
```

is idl not interpreting the input correctly? or.. ??

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thanks to davidf@alpha.pr1.k12.co.us (David Fanning) for replying.
it was another easy problem:

The problem here is that IDL integers (x=0) are two byte integers
and your Fortran integers are four byte integers.
Initialize your variables like this:

```
x=0L & y=0L & z=0L
and it worked!
```

Subject: Re: Trouble reading unformatted f77 (unix) integers?

Posted by [bowman](#) on Wed, 10 May 1995 07:00:00 GMT

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In article <3oqmh1\$nb6@post.gsfc.nasa.gov>,
thompson@orpheus.nascom.nasa.gov (William Thompson) wrote:

> Your problem is very simple. The default integer data type in FORTRAN takes up
> four bytes (INTEGER*4). In IDL parlance, this is known as a long integer. The
> default IDL integer type is a short integer which only takes up two bytes.

Having run into a number of gotchas with short integers (including this one), I do wish there was a way to make LONG the default integer type in IDL.

Ken Bowman

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Subject: Re: Trouble reading unformatted f77 (unix) integers?

Posted by [ec10576](#) on Wed, 10 May 1995 07:00:00 GMT

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I have experienced similar problems, in particular when I try to read integers. My guess has been that it is confused about reading short vs. long integers, but I would love to hear something more definitive.

-Elaine Chapin

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